

Application No. 10/685,899
Reply to Office Action of: September 15, 2009

IN THE DRAWINGS

The attached drawings include a replacement sheet for amended FIG. 4.

Support for the amendments to FIG. 4 may be found in page 8, lines 25-27, of the present application, as originally filed, which refers to web 48 which is between dried web 44 and coated web 52.

REMARKS

A. Status of Claims

Favorable reconsideration of this application, as presently amended, is respectfully requested. Claims 1-26, 35-36, and 40-52 have previously been cancelled, and Claims 53-54 and 63 are currently cancelled. Claims 27-34, 37-39, 55-62, and 64-67 are currently pending. Claims 31-32, 34, and 64 have been withdrawn from consideration as being drawn to a non-elected invention.

B. Procedural Matters

Applicants acknowledge the Examiner's statement at page 2 of the present Office Action regarding the incorrect serial number noted on pages 2-19 of the prior response of August 3, 2009. This error has been corrected in the current amendment.

C. Amendments to the Claims

Claim 27 has been amended to include the language of Claim 53 (now cancelled) to recite that the holdout layer which comprises the starch sizing agent **inhibits significant penetration or absorption of the ink receptive layer into the base layer**. Support for this amendment to Claim 27 may also be found in, for example, paragraph [0014] of the published version (U.S. Appln. No. 2004/0084163, published May 6, 2004) of the above application.¹

Claim 58 has been amended to recite that the ink receptive layer comprises **two ink receptive layers** and that the holdout layer **comprises a holdout layer which contacts each of the two surfaces of the base layer and is disposed between each surface of the base layer and one of the ink receptive layers**. Support for these amendments to Claim 58 may

¹ Unless otherwise stated, all further references to the above application will be with respect to published U.S. Appln. No. 2004/0084163.

be found in, for example, paragraphs [0014] and [0027], as well as FIGS. 1-3, of the of the above application.²

New Claim 66 has been added which depends from amended Claim 27 and which recites a print layer which is **disposed over** the ink receptive layer. Support for new Claim 66 may be found in, for example, FIGS. 1-3 (see print layer 16 on top of respective ink receptive layers 14, 18, or 20), as well as paragraphs [0012], [0024], and [0026], of the of the above application.³

New Claim 67 has been added which depends from amended Claim 27 and which recites that the ink receptive layer **is adjacent the holdout layer**. Support for new Claim 67 may be found in, for example, FIGS. 1-3 (see respective ink receptive layers 14, 18, or 20 which are adjacent holdout layer 12), as well as paragraphs [0007], of the of the above application.⁴

D. Response to Objection to Drawings

At pages 7-8 of the present Office Action, the drawings have been objected to under 37 CFR § 1.83(a) for allegedly failing “to show web 48 as described in the specification at page 8, line 26. Responsive to this objection, Applicants are concurrently submitting a replacement drawing sheet for amended FIG. 4, which adds reference arrow 48 to indicate web 48 between dried web 44 and coated web 52. Support for this amendment to FIG. 4 may be found in page 8, lines 25-27, of the present application, as originally filed.

In view of replacement drawing sheet for amended FIG. 4 being concurrently submitted, these objections to the drawings has been overcome, and should be withdrawn.

² Unless otherwise stated, all further references to the above application will be with respect to published U.S. Appln. No. 2004/0084163.

³ Unless otherwise stated, all further references to the above application will be with respect to published U.S. Appln. No. 2004/0084163.

⁴ Unless otherwise stated, all further references to the above application will be with respect to published U.S. Appln. No. 2004/0084163.

E. **Response to Rejection of Claim 58 under 35 U.S.C. § 112, First Paragraph, for Failing to Comply with the Written Description Requirement**

At pages 2-3 of the present Office Action, Claim 58 has been rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the “written description” requirement. **This rejection is respectfully traversed with respect to this Claim.** as amended:

In support of the rejection of Claim 58 under 35 U.S.C. § 112, first paragraph, the present Office Action makes the following allegation:

Allegation 1: The subject matter of claim 58 was not in the specification or claims as filed. [0014] discloses that holdout layer 12 contacts two surfaces of the base layer (web) in the case where [the] print receptive layer is coated on both surfaces of the web. The claim of claim 58 is broader in scope than this disclosure, as it permits the holdout layer to contact two surfaces of the base layer even when the combination of claim 58 and 27 do not indicate that both surfaces of the base layer are coated with an ink receptive layer. The applicant is requested to cancel all new matter.⁵

Responsive to what Allegation 1 asserts, Claim 58 has been amended to recite that the ink receptive layer comprises **two ink receptive layers** and that the holdout layer **comprises a holdout layer which contacts** each of the two surfaces of the base layer **and is disposed between each surface of the base layer and one of the ink receptive layers.** The subject matter of amended Claim 58 is supported by the specification of the above application, as filed (i.e., is not “new matter”). In particular, Applicants direct the Examiner’s attention to paragraphs [0014] and [0027] of the published version of the above application, which state, respectively, the following:

⁵ See pages 2-3 of the present Office Action.

Paragraph [0014]: If both surfaces of the web [10] are coated with the print receptive layer 14, 18, or 20, then the holdout layer 12 is preferably applied to both surfaces of the web 10.⁶

Paragraph [0027]: When the web is coated with only the biological activity reducing agent, it is particularly preferred to coat both surface of the web 10. Accordingly, the holdout layer 12 is preferably applied to both surface[s] of the web 10.⁷

Web 10 of paragraphs [0014] and [0027] corresponds to the “base layer” in amended Claim 58. Paragraph [0014] also says “both surfaces of the web 10” may be “coated with the [ink]⁸ receptive layer 14, 18, or 20.” As also stated by paragraphs [0014] and [0027], holdout layer 12 may be “applied to both surfaces of the web 10,” and thus is in contact with each of the surfaces of the base layer according to amended Claim 58.

In addition, as further recited in amended Claim 58, the holdout layer is disposed between each surface of the base layer and one of the ink receptive layers and is therefore no broader in scope than the disclosure in the present application, and especially amended Claim 27 from which amended Claim 58 depends. In this regard, Applicants direct the Examiner’s attention to FIGS. 1-3 where holdout layer 12 is disposed between the top or upper surface of web 10 (the “base layer”) and either ink receptive layer 14, ink receptive layer 18, or ink receptive layer 20. In the embodiment recited in amended Claim 58, holdout layer 12 would also be disposed between the bottom or lower surface of web 10 and a second ink receptive layer 14, ink receptive layer 18, or ink receptive layer 20.

Accordingly, in view of these amendments to Claim 58, the rejection of this Claim under 35 U.S.C. § 112, first paragraph, as failing to comply with the “written description” requirement has been overcome, and should therefore be withdrawn

⁶ Emphasis added.

⁷ Emphasis added.

⁸ See, for example, paragraph [0016] which describes “ink receptive layer 14.”

F. Response to Rejection of Claims 54 and 63 under 35 U.S.C. § 112, First Paragraph, for Failing to Comply with the Written Description Requirement

At page 3 of the present Office Action, Claims 54 and 63 have been rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the “written description” requirement. Claims 54 and 63 have now been cancelled. Accordingly, **this rejection is now moot.**

G. Response to Rejection of Claims 54 and 63 under 35 U.S.C. § 112, Second Paragraph, as Being Indefinite

At pages 3-4 of the present Office Action, Claims 54 and 63 have also been rejected under 35 U.S.C. § 112, second paragraph, for allegedly being “indefinite.” Claims 54 and 63 have now been cancelled. Accordingly, **this rejection is now moot.**

H. Response to Rejection of Claims 27-30, 33, 37-39, 53-59, 63, and 65 under 35 U.S.C. § 103(a) as Being Unpatentable over Amick, in view of Malhotra

At pages 4-5 of the present Office Action, Claims 27-30, 33, 37-39, 53-59, 63, and 65 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 99/63157 to Amick (hereafter referred to as “Amick”), taken in view of U.S. Pat. No. 5,709,976 to Malhotra (hereafter referred to as “Malhotra”). **This rejection is respectfully traversed with respect to Claims 27-30, 55-59, and 65,**⁹ as amended or as currently presented, for at least the following reasons.

In support of the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) as being unpatentable over Amick, in view of Malhotra, the present Office Action makes the following allegation:

Allegation 2: [Amick] teaches a paper or paperboard with a basis weight such as 200 g/m² (=123 lb/3000 square feet) (3:7-26) and **a basecoat of starch or**

⁹ Claims 53-54 and 63 have now been cancelled so that the rejection of these Claims over Amick, in view of Malhotra, is now moot.

other materials, with an ink-receptive layer on top that comprises acrylic polymers and additives such as polyvinyl alcohol (6:24-9:23). The improved durability, resistance to staining and storageability are inherent to the coatings. [Amick] fails to teach that the ink receiving layer has a biocide. [Malhotra] teaches a coated paper with a barrier layer and an ink receiving layer over the barrier layer that comprise[s] a biocide, as well as acrylic emulsions (see Abstract; 6:61-65; 12:1-6; 23:9-24:25). It would have been obvious [to] one of ordinary skill in the art to have added the biocide of the [Malhotra] ink receiving layer into the [Amick] paper because of the teaching of [Malhotra] that such a biocide is conventional in an acrylic containing ink receiving layer. [Amick] does not teach the water absorption range, but because the coatings are similar to those claimed by [the] applicant, the water absorption range of the [Amick] paper or paper board are expected to overlap with that claimed by applicant. The ink receptive layer is 0.5-10 g/m² (0.37-6.1 lb per 3000 sf) (4:13-22) which overlaps with the coat weight claimed by applicant.¹⁰

What Allegation 2 asserts does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over Amick, even in view of Malhotra, for at least the following reasons. First, Allegation 2 mischaracterizes Amick as teaching a “basecoat of starch or other materials.” Instead, what Amick actually teaches is “a basecoat containing mineral pigments.”¹¹ Starch is taught at line 20 of page 9 of this reference as one of many different “binders” (not sizing agents) for these mineral pigments in the “basecoat.”

By contrast, the holdout layer recited in amended Claim 27 comprises a “starch sizing agent.” As taught in paragraph [0014] of the above application, this starch sizing agent enables the claimed holdout layer to inhibit “penetration or absorption of the print [ink] receptive layer” into the base layer (i.e., web 10). In addition, amended Claim 27 now recites the language of cancelled Claim 53 that the holdout layer which comprises the starch sizing agent inhibits significant penetration or absorption of the ink receptive layer into the base layer. Nowhere does Amick teach that its “basecoat containing mineral pigments” inhibits penetration or absorption of its ink receptive coating overlaying this “basecoat” into the “cellulosic fiber base stock.” In other words, the holdout layer of amended Claim 27 is not the same as “a basecoat containing mineral pigments” taught by Amick, and provides a

¹⁰ See pages 4-5 of the present Office Action (emphasis added).

¹¹ See page 3, line 15, of Amick (emphasis added).

functionality different property from that of the “basecoat” taught by this reference, i.e., inhibiting penetration or absorption of the ink receptive layer into the base layer.

Second, Allegation 2 proposes a modification of Amick based on the teachings of Malhotra that would **impermissibly** “change the principle of operation” of the Amick paper. “If the proposed modification or combination of prior art **would change the principle of operation** of the prior art invention being modified, then the teachings of the references **are not sufficient** to render the claims prima facie obvious.”¹² While Malhotra teaches including a biocide in the “image receiving coating,” this reference also teaches that this “image receiving coating” is on top of a “hydrophobic barrier layer.” Nowhere does Malhotra teach that this “hydrophobic barrier layer” comprises a “mineral pigment” according to the “basecoat” of Amick. In addition, Allegation 2 **cannot have it both ways** by relying upon so much of Malhotra (i.e., “image receiving coating” which includes a biocide) as supports the proposed combination, but then ignoring those portions of this reference (“image receiving coating” is on top of a “hydrophobic barrier layer” from which “mineral pigment” is absent) **which teach away from the proposed combination.**

Third, Allegation 2 **has not shown that all features** of amended Claim 27 are taught by the references (i.e., Amick and Malhotra) relied upon. In determining patentability under 35 U.S.C. §103(a) over the art (i.e., the references relied upon in Allegation 2), **all of the claim limitations** (e.g., claim elements, features, etc.) must be considered.¹³ **All of the features of amended Claim 27 are not taught or suggested** by the combined references (Amick and Malhotra) for reasons previously presented above in response to Allegation 2. **In mischaracterizing Amick as teaching** a “basecoat of starch or other materials,” Allegation 2 fails to show where these combined references teach **a holdout layer comprising a starch sizing agent** which **inhibits significant penetration or absorption of the ink receptive layer into the base layer** according to amended Claim 27. **In suggesting an impermissible modification of Amick based on the teachings of Malhotra,** Allegation 2 also fails to show where these combined references teach **a holdout layer comprising a starch sizing agent which is disposed between the base layer and an ink receptive layer**

¹² See, e.g., *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); MPEP § 2143.01(VI) (emphasis added).

¹³ See *In re Lowry*, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994).

comprising at least one biocide which inhibits significant penetration or absorption of the ink receptive layer into the base layer according to amended Claim 27. Put differently, this rejection of amended Claim 27 under 35 U.S.C. § 103(a) over **Amick**, in view of **Malhotra**, fails to satisfy at least one of the criteria for obviousness, namely that the prior art references **must teach or suggest all the claim limitations (e.g., elements, features, etc.)**.

Fourth, Allegation 2 **fails to allege any proper motivation for combining the teachings of Malhotra** with those of **Amick**. To properly combine the teachings of **Malhotra** with those of **Amick**, the present Office Action must allege some proper motivation for one of ordinary skill in the art to do so.¹⁴ “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some **teaching, suggestion, or motivation** to do so found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art. This requirement is designed to protect against the tendency of **using the Applicant’s disclosure in hindsight to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention**.”¹⁵

In addition, “[a] proper analysis under 35 U.S.C. § 103 requires, inter alia, a consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed invention; and (2) whether the prior art would have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success; both the suggestion and reasonable expectation of success **must be founded in the prior art, not the applicant’s disclosure**.”¹⁶ The suggestion, teaching or motivation to combine must be explicit, or at least implicit, in the references **or other verifiable evidence provided by the Examiner** relied upon to show such motivation.¹⁷ “[R]jections on obviousness grounds cannot be sustained by mere

¹⁴ See *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Kahn*, 78 U.S.P.Q.2d 1329, 1336 (Fed. Cir. 2006).

¹⁵ See *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 21 USPQ2d 1941 (Fed. Cir. 1992) cited with approval by MPEP § 707.07(f) (emphasis added).

¹⁶ See *In re Vaeck*, 20 USPQ2d 1438, 1442-44 (Fed. Cir. 1991) (emphasis in original).

¹⁷ See e.g., *In re Kahn*, 78 U.S.P.Q.2d 1329, 1336 (Fed. Cir. 2006) (“A suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated by the references.”)

conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion obviousness.”¹⁸

The only motivation suggested by Allegation 2 for combining these references is that “the teaching of [Malhotra] that such a biocide is conventional in an acrylic containing ink receiving layer.” But contrary to the requirements 37 CFR § 1.104(c)(2),¹⁹ as well as to MPEP § 707.05,²⁰ Allegation 2 does not properly address why one of ordinary skill in the art would be motivated based on what Amick teaches to modify the Amick paper as suggested. Put differently, and without improperly using Applicants’ own disclosure in the present application as the road map,²¹ one of ordinary skill in the art would not combine Malhotra with Amick as suggested Allegation 2, much less according to amended Claim 27.

In reply to Applicants’ arguments above in response to Allegation 2 regarding the differences between the claimed holdout layer and the “basecoat” taught by Amick which were presented in Applicants’ prior response of August 3, 2009 (“August 3, 2009 Response”), the present Office Action makes the following additional allegation:

Allegation 3: The applicant has argued that the starch used in the basecoat layer of [Amick] is not the same as the “starch sizing agent” of claim 27, but fails to teach how starch is different from starch. Because the material used in the [Amick] basecoat is starch and the material used in the “holdout layer” of claim 27 is starch, the examiner cannot comprehend how the two materials could behave differently from each other.²²

What Allegation 3 asserts also does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over Amick, even in view of Malhotra, for at least the following reasons. First, and like Allegation 2, Allegation 3 mischaracterizes what Amick fairly teaches regarding its “basecoat layer.” Again, what Amick fairly teaches is “a

¹⁸ See e.g., *In re Kahn*, 78 U.S.P.Q.2d at 1336 (emphasis added).

¹⁹ 37 CFR § 1.104(c)(2) states, in relevant part, that: “The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.” (Emphasis added.)

²⁰ MPEP § 707.05 (Citation of References) states, in relevant part, that: “When such prior art is cited, its pertinence should be explained.”

²¹ As the Federal Circuit held, in determining obviousness, it is improper hindsight reasoning to use an Applicant’s own invention as a “roadmap to find its prior art components.” See *Princeton Biochemicals Inc. v. Beckman Coulter Inc.*, 75 USPQ2d 1051, 1054 (Fed. Cir. 2005) (emphasis added).

²² See page 5 of the present Office Action (emphasis added).

basecoat **containing mineral pigments**.”²³ Starch is again taught at line 20 of page 9 of this reference as **one of many different** “binders,” **but not “sizing agents,”** for these mineral pigments in the “basecoat.”

Second, and most significantly in view of the mischaracterization of what Amick fairly teaches about use of starch as a “binder” for the mineral pigments in the “basecoat,” Allegation 3 **misconstrues** what is recited in amended Claim 27 regarding the “starch **sizing agent**” present in the holdout layer. As pointed out above in response to Allegation 2, this starch sizing agent enables the claimed holdout layer to inhibit “penetration or absorption of the print [ink] receptive layer” into the base layer (i.e., web 10). In fact, as also pointed out above in response to Allegation 2, amended Claim 27 now recites that the holdout layer which comprises the starch sizing agent **inhibits significant penetration or absorption of the ink receptive layer into the base layer**. Contrary to what Allegation 3 asserts, this is not a case of “how starch is different from starch,” but instead a holdout layer of amended Claim 27 **which is not the same as** the “basecoat containing mineral pigments” taught by Amick **because this claimed holdout layer provides a functionality** (i.e., inhibiting penetration or absorption of the ink receptive layer into the base layer) **which is not taught** for this “basecoat” by Amick.

In reply to Applicants’ arguments above in response to Allegation 2 regarding the proposed modification of Amick (based on the teachings of Malhotra) as impermissibly “chang[ing] the principle of operation” of the Amick paper (which were also presented in Applicants’ August 3, 2009 Response), the present Office Action makes the following additional allegation:

Allegation 4: The applicant has also argued that the image receiving coating of [Malhotra] is on top of a “hydrophobic barrier layer”, different from the mineral pigment basecoat of [Amick]. It is the examiner’s position that **[Malhotra] is being used here for the teaching of using a biocide in an ink receiving layer.**²⁴

²³ See page 3, line 15, of Amick (emphasis added).

²⁴ See page 5 of the present Office Action (emphasis added).

What Allegation 4 asserts also does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over **Amick**, even in view of **Malhotra**, for at least the following reasons. Applicants' do not dispute that the present Office Action relies upon **Malhotra** for the "teaching of using a biocide in an ink receiving layer." Instead, what Applicants do dispute is the basis in Allegation 4 for disregarding the teaching in Malhotra that this "image receiving coating" with the biocide is on top of a "hydrophobic barrier layer" from which a "mineral pigment" is absent. In fact, Allegation 4 still does not address Applicants' argument made above in response to Allegation 2 that the proposed modification would impermissibly "change the principle of operation" of the **Amick** paper which comprises a "basecoat containing mineral pigments." Again, like Allegation 2, Allegation 4 cannot have it both ways by relying upon so much of **Malhotra** (i.e., "image receiving coating" which includes a biocide) as supports the proposed combination, but then ignoring those portions of this reference ("image receiving coating" is on top of a "hydrophobic barrier layer" from which "mineral pigment" is absent) which teach away from the proposed combination.

In reply to Applicants' arguments above in response to Allegation 2 regarding "no motivation to combine" the teachings of **Malhotra** with those of **Amick** (which were also presented in Applicants' August 3, 2009 Response), the present Office Action makes the following additional allegation:

Allegation 5: The applicant has also argued that there is no motivation to combine the two references. The examiner disagrees. The motivation to combine the biocide of [Malhotra] into the [Amick] paper is for the evident functionality of a biocide in protecting the ink receiving layer from bacterial growth. These are not facts within the examiner's personal knowledge, as applicant has stated, but rather knowledge generally available to one of ordinary skill in the art.²⁵

What Allegation 5 asserts also does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over **Amick**, even in view of **Malhotra**, for at least the following reasons. First, the assertions in Allegation 5 that the "functionality of a

²⁵ See page 5 of the present Office Action (emphasis added).

biocide” as taught by **Malhotra** “in protecting the ink receiving layer from bacterial growth” is “evident” still does not properly address why one of ordinary skill in the art would be motivated based on what Amick teaches to modify the **Amick** paper as suggested. Second, the assertions in Allegation 5 again ignore (as noted in response to Allegation 4 above) that the proposed modification would impermissibly “change the principle of operation” of the **Amick** paper by also substituting a “hydrophobic barrier layer” from which “mineral pigment” is absent (as taught by **Malhotra**) for the “basecoat containing mineral pigments” of the **Amick** paper. Such an impermissible “change [in] the principle of operation” of the **Amick** paper would instead teach away from the proposed combination with **Malhotra** with respect to amended Claim 27.

Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, depend from amended Claim 27. Accordingly, Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, are patentable over **Amick**, even in view of **Malhotra**, for at least the same reasons presented in response to Allegations 2-5 above as to why amended Claim 27 is patentable over these combined references. Claims 33 and 38 (as currently presented), as well as Claim 58 (as amended) and new Claims 66-67, are further patentable over these combined references because of the features additionally recited in these Claims which are also not taught by these references: “the paper or paperboard has a water absorption in the range of from about 30 to about 40 grams of water per square meter of paper or paperboard as measured by a Cobb Sizing Test according to ASTM D-3285 (TAPPI T-441)” (Claim 33); “a print layer disposed between the holdout layer and the ink receptive layer” (Claim 38); “the base layer comprises two surfaces,” wherein “the ink receptive layer comprises two ink receptive layers,” and wherein “the holdout layer comprises a holdout layer which contacts each of the two surfaces of the base layer and is disposed between each surface of the base layer and one of the ink receptive layers” (amended Claim 58); “a print layer disposed over the ink receptive layer” (new Claim 66); and “the ink receptive layer is adjacent the holdout layer” (new Claim 67).

In addition, Allegation 2 admits that **Amick** “does not teach the water absorption range” of Claim 33. Instead, Allegation 2 asserts that “because the coatings are similar to those claimed by [the] applicant, the water absorption range of the [**Amick**] paper or paper

board are expected to overlap with that claimed by applicant.” In other words, Allegation 2 relies upon an argument of “inherency” for this assertion. But this assertion of “inherency” regarding Claim 33 is **factually unsupported** and therefore contrary to the requirements of MPEP § 2112:

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic **necessarily flows** from the teachings of the applied prior art.”²⁶

Allegation 2 provides **absolutely no facts or other verifiable evidence** that the water absorption range of Claim 33 would “necessarily flow” from the paper/paperboard disclosed in **Amick**.

Contrary also to what Allegation 5 asserts, if the Examiner still maintains that Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, are unpatentable over **Amick**, even in view of **Malhotra**, based on what Allegations 2-5 assert, then Applicants again alternatively assert that this rejection under 35 U.S.C. § 103(a) is based, at least partially, **on facts within the Examiner's personal knowledge which have not been provided to Applicants**. Accordingly, if the Examiner wishes to persist in this rejection of Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, as being unpatentable over **Amick**, even in view of **Malhotra**, under 35 U.S.C. § 103(a) for the reasons asserted in Allegations 2-5, then Applicants again respectfully request that she provide an affidavit/declaration under 37 CFR § 1.104(d)(2)²⁷ because this rejection appears

²⁶ Ex parte Levy, 17 USPQ2d 1461, 1464 (BOPA1 1990), which is cited with approval by MPEP § 2112 under the heading IV (EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY) (emphasis added).

²⁷ See 37 CFR § 1.104(d)(2) which states: “When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.” Applicants again note that in the unpublished case of *In re Sun*, 31 USPQ2d 1451, 1455 (Fed. Cir. 1993), the USPTO argued “the procedures established by 37 C.F.R. Section 1.107(b) (1993) [now 37 CFR § 1.104(d)(2)] expressly entitle an Applicant, on mere request, to an examiner affidavit that provides [citations that support the Examiner’s asserted level of skill in the art]” (emphasis added). Furthermore, in *In re Sun*, the Federal Circuit, held that “this

to be based, at least partially, on facts within the Examiner's personal knowledge which have not been provided to Applicants, and which are not fairly taught by **Amick, Malhotra**, or any other verifiable evidence provided by the Examiner.

For at least the foregoing reasons, Claims 27-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, are patentable over **Amick**, even in view of **Malhotra**. Accordingly, the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) over this combination of references should be withdrawn.

I. Response to Rejection of Claims 27-30, 33, 37-39, 53-59, 63, and 65 under 35 U.S.C. § 103(a) as Being Unpatentable over Bailey

At page 6 of the present Office Action, Claims 27-30, 33, 37-39, 53-59, 63, and 65 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,885,340 to Bailey et al. (hereafter referred to as "**Bailey**"). **This rejection is respectfully traversed with respect to Claims 27-30, 55-59, and 65.**²⁸ as amended or as currently presented, for at least the following reasons.

In support of the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) as being unpatentable over **Bailey**, the present Office Action makes the following allegation:

Allegation 6: [**Bailey**] teaches a printable paper or paperboard coated with a first layer that comprises starch, and second layer that comprises acrylic latex, biocide and other additives (see Abstract; 1:14-41; 2:18-56; 3:35-5:29; see Examples. Because the paper material may be paper board, it appears to meet the basis weight limitations. [**Bailey**] **does not teach the water absorption range**, but because the coatings are similar to those claimed by applicant, the water absorption range of the [**Bailey**] paper or paperboard are expected to overlap with that claimed by applicant. The ink receptive layer is 0.5-10 g/m²

procedure, so readily available, helps save the lack of citation in an office action from possible constitutional infirmity in denying reasonable notice and hence due process." See 31 USPQ2d at 1455.

²⁸ Claims 53-54 and 63 have now been cancelled so that the rejection of these Claims over **Bailey** is now moot.

(0.37-6.1 lb per 300 sf) (4:13-22) which overlaps with the coat weight claimed by applicant²⁹

What Allegation 6 asserts does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over **Bailey** for at least the following reasons. First, **Bailey** does not teach that the first layer of the inorganic pigment-containing aqueous coating composition comprises a starch sizing agent as in the holdout layer of amended Claim 27. Instead, **Bailey** teaches that the sizing agent present in this first layer is “an alkene ketene dimer, an alkenyl succinic anhydride or an anionic polyurethane.”³⁰ In fact, **Bailey** characterizes starch not as a “sizing agent” but as one of several disclosed “adhesives” or “binders” which may be present in either first or second layer (preferably the first layer in the case of starch) of **Bailey**’s coated paper.³¹

Second, Allegation 6 mischaracterizes what **Bailey** fairly teaches regarding what the second layer is and what that second layer may comprise. Specifically, the second layer of **Bailey** is formed from an “inorganic-pigment-containing aqueous coating composition.”³² Also, and contrary to what Allegation 6 asserts, **Bailey** does not specifically teach that the second layer comprises a “biocide”³³ according to the ink receptive layer of amended Claim 27. More significantly, **Bailey** does not teach, and especially does not characterize, this second layer as being an “ink receptive layer” according to amended Claim 27. In fact, and contrary to the requirements 37 CFR § 1.104(c)(2),³⁴ as well as to MPEP § 707.05,³⁵ Allegation 6 does not address why one of ordinary skill in the art would even consider the second layer of **Bailey** to be the “ink receptive layer” of amended Claim 27.

Third, Allegation 6 has not shown that all features of amended Claim 27 are taught by the reference (i.e., **Bailey**) relied upon. In determining patentability under 35 U.S.C.

²⁹ See page 6 of the present Office Action (emphasis added).

³⁰ See abstract, and column 3, lines 11-14, of **Bailey**.

³¹ See column 3, lines 35-41, of **Bailey**.

³² See column 2, lines 25-27, of **Bailey**.

³³ See column 5, lines 1-6, of **Bailey**.

³⁴ 37 CFR § 1.104(c)(2) states, in relevant part, that: “The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.” (Emphasis added.)

³⁵ MPEP § 707.05 (Citation of References) states, in relevant part, that: “When such prior art is cited, its pertinence should be explained.”

§103(a) over the art (i.e., the reference relied upon in Allegation 6), all of the claim limitations (e.g., claim elements, features, etc.) must be considered.³⁶ All of the features of amended Claim 27 (e.g., “starch sizing agent” in holdout layer, an “ink receptive layer” which comprises a “biocide”) are not taught or suggested by Bailey for reasons previously presented above in response to Allegation 6. As noted above, Bailey does not teach that the first layer of the inorganic pigment-containing aqueous coating composition comprises a starch sizing agent as in the holdout layer of amended Claim 27. In mischaracterizing what Bailey fairly teaches regarding the composition and properties of this “second layer,” Allegation 6 also fails to show where this reference teaches an ink receptive layer comprising at least one biocide according to amended Claim 27. Put differently, this rejection of amended Claim 27 under 35 U.S.C. § 103(a) over Bailey fails to satisfy at least one of the criteria for obviousness, namely that the prior art reference must teach or suggest all the claim limitations (e.g., elements, features, etc.).

In reply to Applicants’ arguments above in response to Allegation 6 as to what Bailey fairly teaches regarding what the second layer is/may comprise (which were also presented in Applicants’ August 3, 2009 Response), the present Office Action makes the following additional allegation:

Allegation 7: The applicant has argued that [Bailey] does not teach that the second layer contains acrylic latex and biocides. The examiner disagrees. Among the components that may be in a given coating layer are a) latex such as acrylic latex; and 1) biocides (3:42-5:5). The applicant has also argued that the second layer is not an ink receptive layer. The examiner disagrees. [Bailey] teaches that the paper produced by their invention is capable of being printed on (see Abstract, claim 1, 1:13-41; 2:18-33).³⁷

What Allegation 7 asserts also does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over Bailey for at least the following reasons. First, like the response above to Allegation 6, the portions of Bailey relied upon in Allegation 7 do not specifically teach that the second layer comprises a “biocide” according to the ink

³⁶ See *In re Lowry*, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994).

³⁷ See page 6 of the present Office Action (emphasis added).

receptive layer of amended Claim 27³⁸ Second, and similar to the response to Allegation 6 above, what Allegation 7 asserts regarding the **Bailey** coated paper as “capable of being printed on” does not show this second layer of **Bailey** to be an ink receptive layer according to amended Claim 27. That the **Bailey** coated paper may be “capable of being printed on” is not the same as saying that **Bailey**’s second layer is an ink receptive layer according to amended Claim 27. In fact, the present application distinguishes between “ink receptive layers” and “print layers.” See Claim 37 which recites a “print layer,” and especially amended Claim 38 which recites a “print layer” disposed over the “ink receptive layer.” Applicants also direct the Examiner’s attention to FIGS. 1-3, as well as [0012], [0024], and paragraph [0026] of the present application, which illustrate a print layer 16 which is on top of respective ink receptive layers 14, 18, or 20, as well as new Claim 66 where a print layer is disposed over the ink receptive layer.

Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, depend from amended Claim 27. Accordingly, Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, are patentable over **Bailey** for at least the same reasons presented in response to Allegations 6-7 above as to why amended Claim 27 is patentable over this reference. Claims 33, 38, 59 and 65 (as currently presented), as well as Claim 58 (as amended) and new Claims 66-67, are further patentable over **Bailey** because of the features additionally recited in these Claims which are also not taught by this reference: “the paper or paperboard has a water absorption in the range of from about 30 to about 40 grams of water per square meter of paper or paperboard as measured by a Cobb Sizing Test according to ASTM D-3285 (TAPPI T-441)” (Claim 33); “a print layer disposed between the holdout layer and the ink receptive layer” (Claim 38); “the base layer comprises two surfaces,” wherein “the ink receptive layer comprises two ink receptive layers,” and wherein “the holdout layer comprises a holdout layer which contacts each of the two surfaces of the base layer and is disposed between each surface of the base layer and one

³⁸ Whether, as asserted by Allegations 7 and 8, **Bailey** teaches the second layer may contain an “acrylic latex” also appears to be irrelevant to rejected Claims 27-30, 27-30, 33, 37-39, 53, 55-59, and 65 which do not recite an “acrylic latex.” Only withdrawn Claims 31-32, and 34, recite that the “ink receptive layer” may comprise “at least one acrylic polymer,” while withdrawn Claim 64 recites that the “acrylic polymer is a film forming acrylic polymer.” Claim 59 recites that the “ink receptive layer” may comprise a “crosslinked acrylic” but Bailey does not appear to teach any “crosslinked acrylics” according to this Claim.

of the ink receptive layers" (amended Claim 58); "the ink receptive layer has a coat weight that is as little as 1.5 pounds per 3000 square feet" (Claim 65); "a **print layer** disposed over the **ink receptive layer**" (new Claim 66); and "the ink receptive layer **is adjacent** the holdout layer" (new Claim 67).

In addition, Allegation 6 admits that **Bailey** "does not teach the water absorption range" of Claim 33. Instead, Allegation 6 asserts that "because the coatings are similar to those claimed by applicant, the water absorption range of the [**Bailey**] paper or paperboard are expected to overlap with that claimed by applicant." In other words, Allegation 6 relies upon an argument of "inherency" for this assertion. But this assertion of "inherency" regarding Claim 33 is **factually unsupported** and therefore contrary to the requirements of MPEP § 2112.³⁹ Allegation 7 provides **absolutely no facts or other verifiable evidence** that the water absorption range of amended Claim 33 would "necessarily flow" from the paper/paperboard disclosed in **Bailey**.

In reply to Applicants' arguments presented in their August 3, 2009 Response that the rejection of Claims 27-30, 33, 37-39, 53-59, 63, and 65 as being unpatentable over **Bailey** is based, at least partially, on facts within the personal knowledge of the Examiner which have not been provided to Applicants, the present Office Action makes the following additional allegation:

Allegation 8: [The] Examiner's rejection of claims 27-30, 33, 37-39, 53-59, 63 and 65 based on [**Bailey**] is based on the disclosure of [**Bailey**] and not on [the] personal knowledge of the examiner.⁴⁰

But contrary to what Allegation 8 asserts, Allegations 6-7 still appear to be based **on facts within the Examiner's personal knowledge which have not been provided to Applicants**. Accordingly, if the Examiner wishes to persist in this rejection of Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, as being unpatentable over **Bailey** under 35 U.S.C. § 103(a) for the reasons asserted in Allegations 6-7, then Applicants

³⁹ See response to Allegation 2 above.

⁴⁰ See page 6 of the present Office Action.

respectfully request that she provide an affidavit/declaration under 37 CFR § 1.104(d)(2)⁴¹ because this rejection appears to be based, at least partially, on facts within the Examiner's personal knowledge which have not been provided to Applicants, and which are not fairly taught by **Bailey**, or any other verifiable evidence provided by the Examiner.

For at least the foregoing reasons, Claims 27-30, 33, 37-39, 55-59, and 65 as well as new Claims 66-67, are patentable over **Bailey**. Accordingly, the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) over this reference should be withdrawn.

J. Response to Rejection of Claims 27-30, 33, 37-39, 53-59, 63, and 65 under 35 U.S.C. § 103(a) as Being Unpatentable over Dagan, in view of Malhotra

At pages 6-7 of the present Office Action, Claims 27-30, 33, 37-39, 53-59, 63, and 65 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,291,127 to Dagan et al. (hereafter referred to as "**Dagan**"), taken in view of **Malhotra**. **This rejection is respectfully traversed with respect to Claims 27-30, 55-59, and 65.**⁴² as amended or as currently presented, for at least the following reasons.

In support of the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) as being unpatentable over **Dagan**, in view of **Malhotra**, the present Office Action makes the following allegation:

Allegation 9: [**Dagan**] teaches a paper with a basis weight such as 250g/m² (6:45-59) and a base coat of external sizing agents such as starch or other materials (7:21-66), which may be applied in a sizing tub, and therefore is

⁴¹ See 37 CFR § 1.104(d)(2) which states: "When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons." Applicants again note that in the unpublished case of *In re Sun*, 31 USPQ2d 1451, 1455 (Fed. Cir. 1993), the USPTO argued "the procedures established by 37 C.F.R. Section 1.107(b) (1993) [now 37 CFR § 1.104(d)(2)] expressly entitle an Applicant, on mere request, to an examiner affidavit that provides [citations that support the Examiner's asserted level of skill in the art]" (emphasis added). Furthermore, in *In re Sun*, the Federal Circuit, held that "this procedure, so readily available, helps save the lack of citation in an office action from possible constitutional infirmity in denying reasonable notice and hence due process." See 31 USPQ2d at 1455.

⁴² Claims 53-54 and 63 have now been cancelled so that the rejection of these Claims over **Dagan**, in view of **Malhotra**, is now moot.

applied to both sides of the paper (8:20-25). The external sizing agents are employed for their liquid hold-out properties (7:28-31). There is an ink-receptive layer on top that comprises acrylic polymers or silica or other materials (12:58-13:27)). The improved durability, resistance to staining and storageability are inherent to the coatings. **[Dagan] fails to teach that the ink receiving layer has a biocide.** [Malhotra] teaches a coated paper with a barrier layer and an ink receiving layer over the barrier layer that comprise[s] a biocide, as well as acrylic emulsions (see Abstract; 6:61-65; 12:1-6; 23:9-24:25). It would have been obvious [to] one of ordinary skill in the art to have added the biocide of the [Malhotra] ink receiving layer into the [Dagan] paper **because of the teaching of [Malhotra] that such a biocide is conventional in an acrylic containing ink receiving layer.** [Dagan] does not teach the water absorption range, **but because the coatings are similar to those claimed by [the] applicant, the water absorption range of the [Dagan] paper is expected to overlap with that claimed by applicant.**⁴³

What Allegation 9 asserts does not support the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 as being unpatentable over **Dagan**, even in view of **Malhotra**, for at least the following reasons. First, Allegation 9 proposes a modification of **Dagan** based on the teachings of **Malhotra** that would **impermissibly** “change the principle of operation” of the **Dagan** imaging member. “If the proposed modification or combination of prior art **would change the principle of operation** of the prior art invention being modified, then the teachings of the references **are not sufficient** to render the claims prima facie obvious.”⁴⁴ While **Malhotra** teaches including a biocide in its “image receiving coating,” this reference also teaches that this “image receiving coating” is on top of a hydrophobic barrier layer which is **coated on both sides of the paper substrate.**⁴⁵ By contrast, **Dagan** teaches **impregnating the surfaces** of the base comprising the cellulosic paper with a water dispersible condensation polymer to form the barrier layer for its imaging member.⁴⁶

In fact, **nowhere** does **Malhotra** teach that its “hydrophobic barrier layer” is impregnated into the surfaces of the paper substrate according to the “barrier layer” of **Dagan’s** imaging member. In addition, **Dagan** suggests a desire to **avoid coating the base**

⁴³ See pages 6-7 of the present Office Action (emphasis added).

⁴⁴ See, e.g., *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); MPEP § 2143.01(VI) (emphasis added). See also response to Allegation 2 above.

⁴⁵ See, e.g., abstract, as well as column 6, lines 40-42, of **Malhotra**.

⁴⁶ See, e.g., abstract, as well as column 3, lines 6-10, of **Dagan**.

comprising the cellulosic paper with this barrier layer,⁴⁷ thus “teaching away” from the coated hydrophobic barrier layer of the Malhotra paper. Like the response to Allegation 2 above, Allegation 9 cannot have it both ways by relying upon so much of Malhotra (i.e., “image receiving coating” which includes a biocide) as supports the proposed combination, but then ignoring those portions of this reference (i.e., “hydrophobic barrier layer” which is coated on, not impregnated into, the paper substrate) which would teach away from the proposed combination.

Second, Allegation 9 has not shown that all features of amended Claim 27 are taught by the references (i.e., Dagan and Malhotra) relied upon. In determining patentability under 35 U.S.C. § 103(a) over the art (i.e., the references relied upon in Allegation 9), all of the claim limitations (e.g., claim elements, features, etc.) must be considered.⁴⁸ All of the features of amended Claim 27 are not taught or suggested by the combined references (Dagan and Malhotra) for reasons previously presented above in response to Allegation 9. In suggesting an impermissible modification of Dagan based on the teachings of Malhotra, Allegation 9 fails to show where these combined references teach an ink receptive layer comprising at least one biocide over a holdout layer comprising a starch sizing agent which is disposed between the base layer and the ink receptive layer according to amended Claim 27. Put differently, this rejection of amended Claim 27 under 35 U.S.C. § 103(a) over Dagan, in view of Malhotra, fails to satisfy at least one of the criteria for obviousness, namely that the prior art references must teach or suggest all the claim limitations (e.g., elements, features, etc.).

Third, Allegation 9 fails to allege any proper motivation for combining the teachings of Malhotra with those of Dagan. To properly combine the teachings of Dagan with those of Amick, the present Office Action must allege some proper motivation for one of ordinary skill in the art to do so.⁴⁹ The only motivation suggested by Allegation 9 for combining these references is that “the teaching of [Malhotra] that such a biocide is conventional in an acrylic containing ink receiving layer.” But contrary to the requirements

⁴⁷ See column 2, lines 40-45, as well as column 3, lines 26-29, of Dagan which express a desire to avoid polymeric holdout layers that are extrusion coated or laminated to a cellulosic paper base.

⁴⁸ See *In re Lowry*, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994).

⁴⁹ See cases cited in response to Allegation 2 above.

37 CFR § 1.104(c)(2),⁵⁰ as well as to MPEP § 707.05,⁵¹ Allegation 9 does not properly address why one of ordinary skill in the art would be motivated based on what Dagan teaches to modify the **Dagan** imaging member as suggested. Put differently, and without improperly using Applicants' own disclosure in the present application as the road map,⁵² one of ordinary skill in the art would not combine **Malhotra** with **Dagan** as suggested Allegation 9, much less according to amended Claim 27.

Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, depend from amended Claim 27. Accordingly, Claims 28-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, are patentable over **Dagan**, even in view of **Malhotra**, for at least the same reasons presented in response to Allegation 9 above as to why amended Claim 27 is patentable over these combined references. Claims 33 and 38 (as currently presented), as well as Claim 58 (as amended) and new Claims 66, are further patentable over these combined references because of the features additionally recited in these Claims which are also not taught by these references: "the paper or paperboard has a water absorption in the range of from about 30 to about 40 grams of water per square meter of paper or paperboard as measured by a Cobb Sizing Test according to ASTM D-3285 (TAPPI T-441)" (Claim 33); "a print layer disposed between the holdout layer and the ink receptive layer" (Claim 38); "the base layer comprises two surfaces," wherein "the ink receptive layer comprises two ink receptive layers," and wherein "the holdout layer comprises a holdout layer which contacts each of the two surfaces of the base layer and is disposed between each surface of the base layer and one of the ink receptive layers" (amended Claim 58); "a print layer disposed over the ink receptive layer" (new Claim 66); and "the ink receptive layer is adjacent the holdout layer" (new Claim 67).

In addition, Allegation 9 admits that **Dagan** "does not teach the water absorption range" of Claim 33. Instead, Allegation 9 asserts that "because the coatings are similar to

⁵⁰ 37 CFR § 1.104(c)(2) states, in relevant part, that: "The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." (Emphasis added.)

⁵¹ MPEP § 707.05 (Citation of References) states, in relevant part, that: "When such prior art is cited, its pertinence should be explained."

⁵² As the Federal Circuit held, in determining obviousness, it is improper hindsight reasoning to use an Applicant's own invention as a "roadmap to find its prior art components." See *Princeton Biochemicals Inc. v. Beckman Coulter Inc.*, 75 USPQ2d 1051, 1054 (Fed. Cir. 2005) (emphasis added).

those claimed by [the] applicant, the water absorption range of the [Dagan] paper is expected to overlap with that claimed by applicant.” In other words, Allegation 9 relies upon an argument of “inherency” for this assertion. But this assertion of “inherency” regarding Claim 33 is **factually unsupported** and therefore contrary to the requirements of MPEP § 2112.⁵³ Allegation 9 provides **absolutely no facts or other verifiable evidence** that the water absorption range of Claim 33 would “necessarily flow” from the paper/paperboard disclosed in Dagan.

If the Examiner still maintains that Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, are unpatentable over Dagan, even in view of Malhotra, based on what Allegation 9 asserts, then Applicants alternatively assert that this rejection under 35 U.S.C. § 103(a) is based, at least partially, **on facts within the Examiner's personal knowledge which have not been provided to Applicants**. Accordingly, if the Examiner wishes to persist in this rejection of Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, as being unpatentable over Dagan, even in view of Malhotra, under 35 U.S.C. § 103(a) for the reasons asserted in Allegation 9, then Applicants again respectfully request that she provide an affidavit/declaration under 37 CFR § 1.104(d)(2)⁵⁴ because this rejection appears to be based, at least partially, on facts within the Examiner's personal knowledge which have not been provided to Applicants, and which are not fairly taught by Dagan, Malhotra, or any other verifiable evidence provided by the Examiner.

For at least the foregoing reasons, Claims 27-30, 33, 37-39, 55-59, and 65, as well as new Claims 66-67, are patentable over Dagan, even in view of Malhotra. Accordingly, the rejection of Claims 27-30, 33, 37-39, 55-59, and 65 under 35 U.S.C. § 103(a) over this combination of references should be withdrawn.

⁵³ See responses to Allegation 2 and 6 above.

⁵⁴ See 37 CFR § 1.104(d)(2) which states: “When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.” Applicants again note that in the unpublished case of *In re Sun*, 31 USPQ2d 1451, 1455 (Fed. Cir. 1993), the USPTO argued “the procedures established by 37 C.F.R. Section 1.107(b) (1993) [now 37 CFR § 1.104(d)(2)] expressly entitle an Applicant, on mere request, to an examiner affidavit that provides [citations that support the Examiner's asserted level of skill in the art]” (emphasis added). Furthermore, in *In re Sun*, the Federal Circuit, held that “this procedure, so readily available, helps save the lack of citation in an office action from possible constitutional infirmity in denying reasonable notice and hence due process.” See 31 USPQ2d at 1455.

Reply to Office Action of : September 15, 2009

K. Response to Rejection of Claims 60-62 under 35 U.S.C. § 103(a) as Being Unpatentable over Amick, Taken in view of Malhotra or Bailey, or Dagan, and Further Taken in view of Ghosh

At pages 7-8 of the present Office Action, Claims 60-62 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over **Amick**, in view of **Malhotra** or **Bailey**, or **Dagan**, and further in view of EP 880892 to Ghosh et al. (hereafter referred to as “**Ghosh**”). **This rejection is respectfully traversed with respect to these Claims**, as currently presented, for at least the following reasons.

In support of this rejection of Claims 60-62 as being unpatentable under 35 U.S.C. § 103(a) over **Amick**, in view of **Malhotra** or **Bailey**, or **Dagan**, and further in view of **Ghosh**, the present Office Action makes the following allegation:

Allegation 10: [**Amick**], [**Malhotra**], [**Bailey**] and [**Dagan**] are all applied here for the reasons given above. **None of these references teach the biocides of claims 60-62.** [**Ghosh**] teaches that 3-iodo-2-propynyl butyl carbamate (4:25) is a microbicide that may be used in paper coatings (5:8-19). It would have been obvious to one of ordinary skill in the art to have substituted the biocide of [**Malhotra**] or [**Bailey**] with the carbamate biocide of [**Ghosh**] with the expectation of success in controlling bacterial growth because of the teaching of [**Ghosh**] that 3-ido-2-propynyl butyl carbamate is a successful biocide for paper.⁵⁵

What Allegation 10 asserts does not support the rejection of Claims 60-62 as being unpatentable over **Amick**, in view of **Malhotra** or **Bailey**, or **Dagan**, and further in view of **Ghosh**, for at least the following reasons. In determining patentability under 35 U.S.C. §103(a) over the art (*i.e.*, the references relied upon in Allegation 10), **all of the claim limitations** (e.g., claim elements, features, *etc.*) must be considered.⁵⁶ **All of the features of amended Claim 27** (from which Claims 60-62 depend) **are not taught or suggested by Amick, Malhotra, Bailey, or Dagan** for reasons previously presented in response to Allegations 2-9 above. Allegation 10 only relies upon **Ghosh** to teach “that 3-iodo-2-

⁵⁵ See pages 7-8 of the present Office Action (emphasis added).

⁵⁶ See *In re Lowry*, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994).

propynyl butyl carbamate" is a "microbiocide that may be used in paper coatings," but does not assert that **Ghosh** teaches any of the features of amended Claim 27 (from which Claims 60-62 depend)-which are missing from Amick, Malhotra, Bailey, and Dagan.⁵⁷

Accordingly, Claims 60-62 are patentable over this combination of references for the same reasons presented in response to Allegations 2-9 above as to why amended Claim 27 is patentable over this combination of references.⁵⁸

For at least the foregoing reasons, Claims 60-62 are patentable over **Amick**, even in view of **Malhotra** or **Bailey**, or **Dagan**, and even further in view of **Ghosh**,. Accordingly, the rejection of these Claims under 35 U.S.C. § 103(a) over this combination of references should be withdrawn.

⁵⁷ Discussed above in response to Allegations 2-9.

⁵⁸ Page 8 of the present Office Action additionally alleges that: "The applicant has not presented additional arguments [regarding] this rejection other than the arguments presented above." This allegation is correct only to the extent it refers to "additional arguments" beyond those presented in response to Allegations 2-9 above with respect to the patentability of amended Claim 27.

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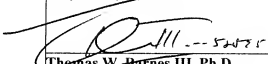
L. Conclusion

The objection to the drawings has been corrected, and should be withdrawn.

Claim 58, as amended, satisfies the requirements of 35 U.S.C. § 112, first paragraph, regarding "written description."

Claims 27-30, 33, 37-39, 55-59, and 65, as amended or as currently presented, as well as new Claims 66-67, are patentable over the art relied upon in the present Office Action. Accordingly, Claims 27-30, 33, 37-39, 55-59, and 65-66 are in condition for allowance, and favorable action is earnestly solicited thereon.

Please charge the amount of **\$0.00** required for the request for extension of time to our Deposit Account No. 09-0525. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 09-0525. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time.

<p>Correspondence Client Number: 01726</p> <p>(513) 248-6736 (phone) (513) 248-6455 (fax)</p>	Respectfully Submitted,	
		
	Thomas W. Barnes III, Ph.D.	
	Registration No.	52,595